

DESCRIPTION OF A NEW CRYPTOSTEMMA FROM
NORTH AMERICA

(Hemiptera: Cryptostemmatidae)

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The present paper contains the description of a new species of *Cryptostemma* collected in California by Dr. R. L. Usinger and J. D. Lattin. This genus, though apparently rather poor in species, is known from various parts of the world: Europe, Asia Minor, southern North America, Central America, the West Indies and Trinidad, northwestern Argentina and New Guinea. Only one species has thus far been reported from the U.S.A., viz., *Cryptostemma uhleri* recorded by Usinger (1945) from Georgia. It is quite possible that additional species will be found and new locality records for the known species obtained if an adequate search is made for these tiny Hemiptera in their typical habitat, viz., under stones on the shores of mountain streams and other bodies of water.

***Cryptostemma usingeri* Wygodzinsky, new species**

Color of body and appendages stramineous; pronotum brownish; fore wings slightly iridescent; abdomen somewhat darker below.

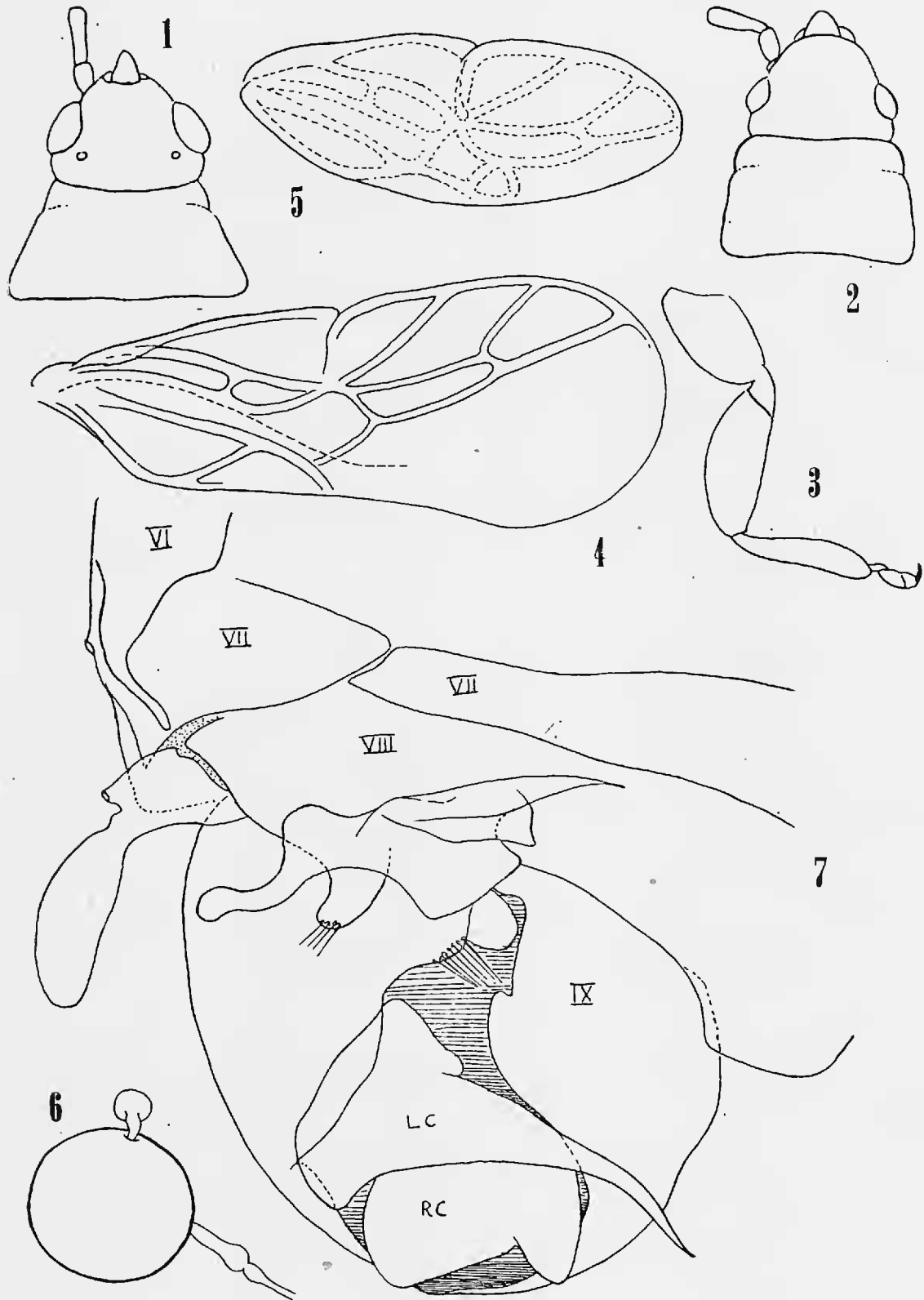
Macropterous male.—General shape subparallel. Length 1.7 mm. Head and thorax as in fig. 1; pronotum distinctly widened posteriorly. Ocelli large. Rostrum short, attaining hind border of prosternum. Second segment of antennae twice as long as first. Macrochaetae of antero-lateral angles of pronotum inconspicuous, those of postero-lateral angles distinct but short. Hind border of pronotum slightly emarginate.

Forewings as in fig. 4, surpassing slightly the apex of abdomen. Discal and apical cell separated by a transverse vein; no small cell at base of discal cell.

Fore legs incrassate, median and hind pairs more slender. Coxae simple. Spinelike setae on femora of second and third pair distinct. Tarsal formula 3:3:3. Tarsi of pairs I and II short and stout (fig. 3), of hind pair elongate; without special characters. Praetarsi of pairs I and II each with a pulvillus.

Abdomen and genitalia as in figs. 7–13. Chaetotaxy as usual. Sternites II–IX and tergites III–VIII well developed, of unequal size, asymmetrical. Spiracles present on parasternites IV–VIII. Left-hand parasternite VI prolonged into a slender, curved process (fig. 7). Tergite VII subdivided diagonally, the left-hand portion smaller than the other. Tergite VIII large; right-hand parasternite fused with tergite, left-hand parasternite free, movable, with a subelliptical projection (figs. 7, 11); hind border of tergite VIII with several backwardly directed processes (fig. 7). Hypopygium as in figs. 7, 8, 9; claspers as in figs. 7, 8, 12, 13; phallosoma as in fig. 10.

Brachypterous male.—Length 1.4 mm. Shape oval. General characters as in macropterous male. Ocelli absent. Tarsal formula 3:3:3, shape of tarsi as in macropterous male, pulvilli present on pairs I and II. Pronotum

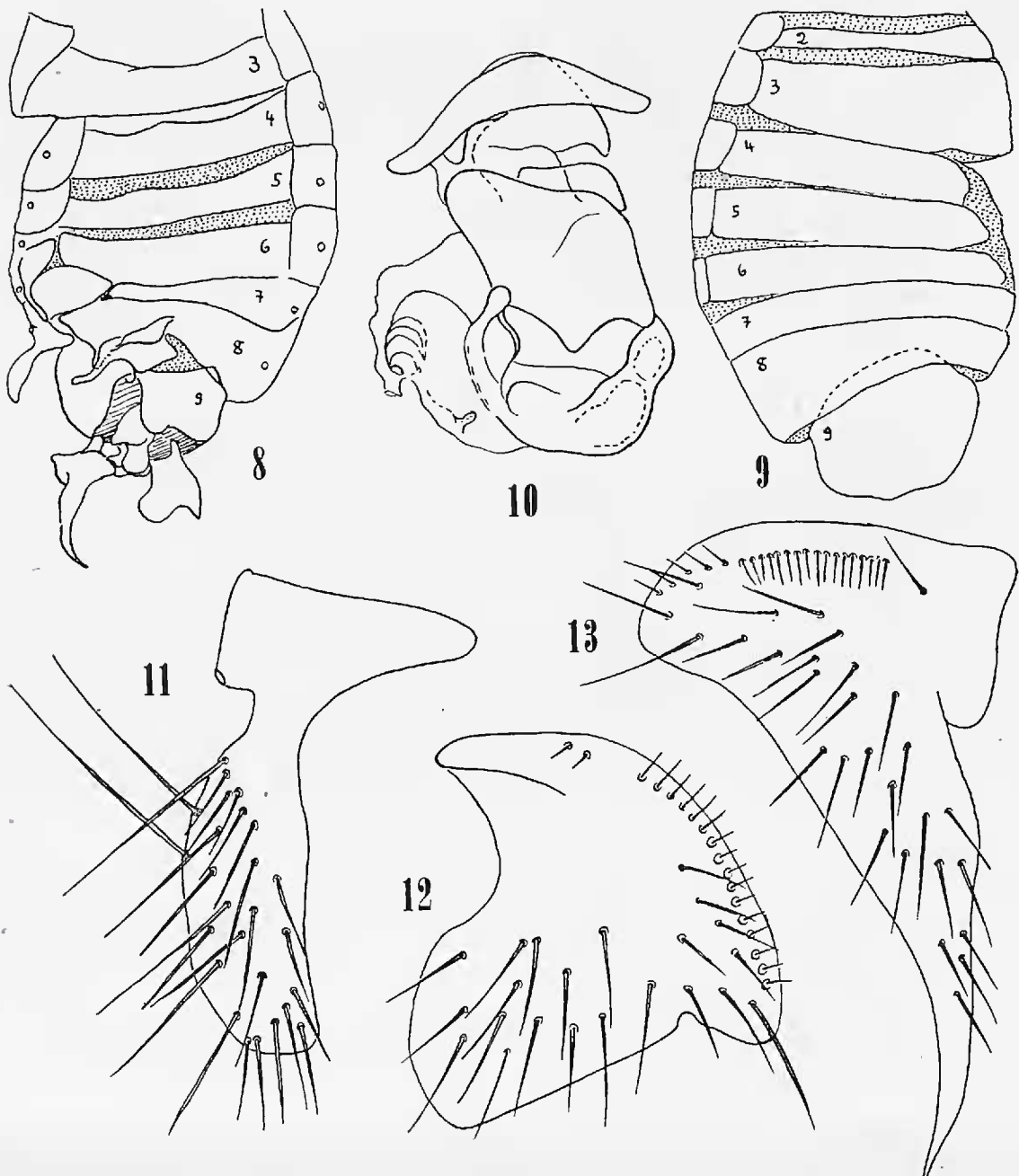


Cryptostemma usingeri Wygodzinsky. Fig. 1, head and pronotum of macropterous male; fig. 2, idem, brachypterous female; fig. 3, fore leg of macropterous male; fig. 4, fore wing of macropterous male; fig. 5, fore wing of brachypterous male; fig. 6, spermatheca of female; fig. 7, genital region of male, seen from above.—Wygodzinsky del.

almost rectangular, only slightly widened posteriorly (fig. 2). Fore wings much reduced, coriaceous, not quite reaching to apex of abdomen; venation difficult to make out, as in fig 5; fracture distinct. Hind wings apparently absent. Abdomen and genitalia as in macropterous male.

Brachypterous female.—General aspect as in brachypterous male. Length 1.5 mm. Tarsal formula 2:2:3; anterior and median tarsi incrassate, though less so than in male; pulvilli absent. Fore wings as in brachypterous male, hardly surpassing half the length of abdomen. General characters of abdomen as usual; spermatheca as in fig. 6.

Fifth instar nymph.—General characters, shape, chaetotaxy of body and armature of praetarsi as described for *Cryptostemma haywardi* (Wygod-



Cryptostemma usingeri Wygodzinsky. Fig. 8, abdomen of male, dorsal view; fig. 9 idem, ventral aspect; fig. 10, phallosoma; fig. 11, left-hand parasternite VIII; fig. 12, right clasper; fig. 13, left clasper.—Wygodzinsky del.

zinsky, 1952); however, with an additional small gland opening between abdominal tergites VII and VIII.

Type locality: HOT CREEK, INYO COUNTY, CALIFORNIA, 17-VII-1953, R. L. Usinger and J. D. Lattin collectors (1 macrop-terous male, holotype, 1 brachypterous female, allotype in collec-tions of California Academy of Sciences, and 3 brachypterous males and 2 brachypterous females, paratypes, and 8 nymphs in the collections of R. L. Usinger, J. D. Lattin and the author).

The new species is named in honor of Dr. R. L. Usinger to whom my sincere thanks are due for allowing me to describe this interesting insect.

Most of the described species of the genus *Cryptostemma*, viz. *alienum* Herrich-Schaeffer, 1835, *birói* Wygodzinsky, 1950, *hay-wardi* Wygodzinsky, 1952, *pratti* Usinger, 1945, *sordida* China, 1946, and *uhleri* McAtee & Malloch, 1925, possess a distinct small cell at the base of the large discal cell of the fore wings; this small cell is not found in *usingeri* sp. n. The extremely short diagnosis of *C. smithi* McAtee & Malloch, 1925, does not mention the absence or presence of said cell, but in that species the second antennal segment is distinctly less than twice as long as the first (twice as long as the first in *usingeri*). *C. pedunculatum* McAtee & Malloch, 1925, has no small cell at the base of the discal cell, but the discal and apical cells are separated by a longitudinal vein (separated by a transverse vein in *usingeri*). *Cryptostemma (Harpago) castaneovitreus* recently described by Linnavuori (1951) differs by the distinctive venation of its fore wing. The complex male abdomen and genitalia furnish excellent additional specific characters (see Wygodzinsky 1948, 1952).

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